

CLAIMS:

1. A method of encoding (2) a signal (S) to obtain a bit-stream (V,TS), the method comprising the steps of:
providing (12,13) blocks of quantized transform coefficients (C_i); and
attenuating (19) higher-frequency transform coefficients (C_i) of a given block
5 more than lower-frequency transform coefficients of the given block.
2. A method as claimed in claim 1, the step of attenuating comprising:
quantizing (19) the transform coefficients (C_i) of the given block with a curve
(QC) having higher quantization steps (Q_{ADD}) for higher-frequency transform coefficients
10 (C_i), without putting information concerning said curve (QC) into the bit-stream (V,TS).
3. A method as claimed in claim 2,
further comprising the step of shifting (19,21) the curve (QC) to adjust a bit
rate (R) of the bit-stream (V,TS).
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4. A method as claimed in claim 2,
further comprising the step of multiplying (19,21) the curve (QC) to adjust a
bit rate (R) of the bit-stream (V,TS).
- 20 5. A method as claimed in claim 2, wherein the signal (S) comprises intra-coded
and predictively coded pictures, the method comprising the step of:
quantizing (19,21) predictively coded pictures at an end of a prediction
sequence more coarsely than predictively coded pictures at a start of the prediction sequence.
- 25 6. A method as claimed in claim 1, the method further comprising the steps of:
decoding (14,15) the blocks of quantized transform coefficients (C_i) to obtain
a reconstructed picture rather than decoding (14,15) the attenuated (19) high-frequency
transform coefficients (C_i).

7. A method as claimed in claim 1, the method further comprising:
attenuating (19) high frequency transform coefficients (C_i) in a plurality of
blocks, wherein the blocks are adaptively attenuated depending on their content.

8. A method as claimed in claim 7, wherein chrominance blocks are less
attenuated (19) than luminance blocks.

9. A method as claimed in claim 7, wherein blocks with an energy content
higher than other blocks are less attenuated (19) than the other blocks.

10. A method as claimed in claim 1, wherein at least one selected high-frequency
transform coefficient (C_i) is not attenuated (19).

11. A method as claimed in claim 10, wherein the at least one selected high-
frequency transform coefficient (C_i) has a frequency higher than a given frequency threshold
and an amplitude higher than a given amplitude threshold.

12. A device (2) for encoding a signal (S) to obtain a bit-stream (V,TS),
comprising:
means (12,13) for providing blocks of quantized transform coefficients (C_i);
and
means (19) for attenuating high-frequency transform coefficients (C_i) of a
given block.

13. A transmitter (1) comprising:
means (10) for obtaining a signal (S); and
a device (2) for encoding the signal (S) as claimed in claim 12.

14. A method of transcoding (5) an encoded signal (TS1,V1), comprising the steps
of:
decoding (50,51) the encoded signal (TS1,V1) to obtain blocks of quantized
transform coefficients (C_i); and
attenuating (52) high-frequency transform coefficients (C_i) of a given block.

15. A bit rate transcoder (5) for transcoding an encoded signal (TS1,V1) comprising:

means (50,51) for decoding the encoded signal (TS1,V1) to obtain blocks of quantized transform coefficients (C_i); and

5 means for attenuating (52) high-frequency transform coefficients (C_i) of a given block.

16. A bit rate transcoder (7) as claimed in claim 15, the bit rate transcoder (7) further comprising:

10 means (70,72) for re-quantizing the quantized transform coefficients to obtain re-quantized coefficients; and

a feedback loop (73-78,71) for compensating a re-quantization error;

the means for attenuating (52) being arranged to attenuate high-frequency coefficients in blocks of the re-quantized coefficients.

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17. A receiver (3) comprising:

means (4,50) for obtaining an encoded signal (TS1,V1); and

a bit rate transcoder (5) for transcoding the encoded signal (TS1,V1) as claimed in claim 15.

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18. A bit-stream (V,TS,V2,TS2) comprising blocks of quantized transform coefficients (C_i), wherein high-frequency transform coefficients (C_i) of a given block have been attenuated.

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19. A storage medium (6) on which a bit-stream (V,TS,V2,TS2) as claimed in claim 18 is stored.